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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,713	12/21/2001	Michel Buard	13864	6794

7590

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EXAMINER

SMITH, JULIE KNECHT

ART UNIT

PAPER NUMBER

3682

DATE MAILED: 03/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

10/024,713

Applicant(s)

BUARD ET AL.

Examiner

Julie K Smith

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-10, drawn to a bearing cage, classified in class 384, subclass 531.
  - II. Claim 11, drawn to method of assembling a bearing, classified in class 29, subclass 898.061.
2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the method of assembling could be used to assemble another bearing, for example, the bearing in US 5,768,060 to Albrecht et al..
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Ralph Dowell on March 10, 2003 a provisional election was made without traverse to prosecute the invention of I, claims 1-10. Affirmation of this election must be made by applicant in replying to this Office action. Claim 11 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 6 and 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Ducrue (0 288 334).

Regarding claims 1 and 8-9, Ducrue discloses a ball bearing cage in the form of a ring obtained by machining or casting metal or composite, defining recesses (7,12) for receiving balls (3) in one row and intended to be interposed between an inner ring (1) and an outer ring (2) of a bearing (see fig. 3), wherein said recesses are distributed in two groups, each recess of the first group having an opening for positioning a ball located on a first side of said cage, while each recess of the second group has an opening for positioning a ball located on a second side of said cage, opposite the first side (see fig. 4).

Regarding claim 2, Ducrue discloses each recess being defined between two arms and a bottom, said arms extending, when said cage is in configuration mounted in a bearing, in a direction substantially parallel to an axis of rotation of the bearing, while said bottom is substantially perpendicular to said axis.

Regarding claim 3, Ducrue discloses certain of said arms define two adjacent recesses belonging to the same group of recesses, said arms each comprising a first end adjacent the respective bottoms of said adjacent recesses and a second free end.

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Regarding claim 4, Ducrue discloses certain of said arms defining two adjacent recesses belonging to the two groups of recesses, said arms comprising a first end adjacent the bottom of one of said two adjacent recesses and a second end adjacent the bottom of the other adjacent recesses.

Regarding claim 6, Ducrue discloses said arms forming two concave surfaces (8a,b) oriented towards two adjacent recesses and adapted to cooperate with the outer surface of said balls (see fig. 7).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ducrue as applied to claims 1-4, 6 and 8-9 above, and further in view of Berger (2,833,244). Ducrue discloses a bearing cage as claimed, but lacks an orifice at the bottom of the recess. However, Berger teaches a group of recesses, wherein the bottom is pierced with an orifice.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cage of Ducrue with the teachings of Berger to provide an orifice at the bottom of the recess so that the recess can be accessed without disassembling the bearing.

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9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ducrue as applied to claims 1-4, 6 and 8-9 above. Ducrue discloses a bearing cage, as claimed, but does not disclose diametrically opposing recesses in the second group of recesses. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the location of the second group of recesses to be opposed diametrically, as the location of the recesses would not have changed the function of the bearing cage.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ducrue as applied to claims 1-4, 6 and 8-9 above, and further in view of Albrecht et al. (5,768,060). Ducrue discloses a bearing cage, as claimed, but lacks a notch, as claimed. However, Albrecht et al. teaches a bearing ring (see fig. 2a) provided with a notch (230) for introduction of balls in an internal volume defined between races formed respectively on said inner and outer rings.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cage of Ducrue with the teachings of Albrecht et al. to provide a notch on a ring so as to provide means for assembly and replacement of balls.

### *Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

4,278,307 to Olschewski et al.

4,626,113 to Forknall et al.

5,941,704 to Arai et al.

4,204,717 to Ernst et al.

4,451,098 to Farley et al.

3,586,405 to Claesson

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1,013,518 to Schilling

4,723,851 to Troster et al.

4,804,276 to Olschewski et al.

1,303,712 to Newmann

924,904 to Hess

851,697 to Schneider

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie K Smith whose telephone number is 703-305-3948. The examiner can normally be reached on Monday-Friday, 8-5:30, (Every other Friday off).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on 703-308-3668. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

JKS

jks

March 10, 2003

  
DAVID A. BUCCI  
SUPERVISORY PATENT EXAMINER  
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